

12.)
CASE OF

SPONTANEOUS CURE OF OVARIAN DROPSY, BY MEANS OF AN ULCERATIVE OPENING OF THE CYST INTO THE BLADDER.

BY

JOHN HUGHES BENNETT, M.D., F.R.S.E.,

PROFESSOR OF THE INSTITUTES OF MEDICINE, AND ONE OF THE PROFESSORS OF CLINICAL
MEDICINE, IN THE UNIVERSITY OF EDINBURGH.

[FROM THE MONTHLY JOURNAL OF MEDICAL SCIENCE, FEBRUARY, 1849.]

(*Read to the Medico-Chirurgical Society of Edinburgh, January 3, 1849.*)

IN a paper which I had the honour of reading to this Society in December 1845,¹ I described the general anatomy and mode of growth of encysted tumours of the ovary. I pointed out that, while in many cases ulceration took place in the external sac, and permitted fluid secreted within the tumour to flow through the openings, and collect in the cavity of the peritoneum; in other cases the sac expanded more rapidly, and the included cysts broke into each other. Both external and internal ulcerations may occur together; but when the former do not take place, the latter are more rapid, gradually produce a less number and larger size in the secondary cysts, and at length, in the last stage of the growth, they all break down, and occasion one large cyst only. I further stated, that if at this period in the progress of an ovarian encysted tumour, a puncture was made, or an ulcerative opening formed, whereby the contents could be discharged, and the walls of the cyst brought into contact, a permanent cure might be accomplished; and I alluded to the occasional occurrence of rupture of such cysts, and their subsequent disappearance as corroborating this statement.

The following case seems to me an interesting proof of the correctness of these pathological views:—

CASE.—Anne Pyper, a servant, aged 25, was admitted into the *female* clinical ward of the Royal Infirmary, Nov. 8, 1848. She had been delivered fourteen days previously of a male child in the Maternity Hospital; and, on inquiry, I find that the labour was a natural one, and presented nothing unusual. On the birth of the child, however, the abdomen still continued enlarged, and at first led to the suspicion that another foetus remained in the uterus. After a time the

¹ Pathological and Clinical Observations on Encysted Tumours of the Ovary.
—*Ed. Med. and Surg. Journal*, January 1846.

true nature of the case was rendered manifest, and a large swelling was detected, which was moveable to a certain extent, and presented all the characters of an encysted tumour of the left ovary.

When I first examined her in the Infirmary, I found the abdomen swollen to about the size of a woman's during the sixth or seventh month of pregnancy. The tumour extended from the epigastrium to the pubes, but bulged considerably towards the left side. Its surface was irregular; and two large nodules, each the size of a cocoa-nut, existed about its centre. It was tense and firm to the feel, somewhat elastic, but no fluctuation could be detected. The tumour was firmly fixed, and the seat of constant pain, especially in the left lumbar region, which was increased by pressure, by lying on the right side, or on assuming the erect posture. The urine was of a slight yellow colour, and presented its normal characters. The digestive, respiratory, circulatory, nervous, and integumentary organs appeared to be healthy. She had observed the tumour seven months before her delivery; and it has gone on gradually increasing, and been somewhat painful from the first. *Eight leeches were ordered to the most painful part of the abdomen.*

For four days the patient remained in the same condition, the local pain, however, having been relieved by the leeches. On Nov. 12, my attention was directed to the urine, which now presented a copious white deposit, occupying two-fifths of the jar, while the supernatant portion was of a light amber colour, and unusually viscid. The deposit was determined by the microscope to consist of pus, mingled with a few compound granular corpuscles. The clear portion was strongly coagulable by heat and nitric acid.

At first I imagined that the cyst had burst into the vagina, but the patient and nurse assured me that there was no discharge between the intervals of micturition, and that all the fluid came from the bladder.

The urine presented the same characters during the next three days; the amount discharged during the twenty-four hours being about three pints. On the 15th, I observed that the tumour had somewhat diminished in size, its hardness and tensility had disappeared, and distinct fluctuation was perceptible in it. *A broad flannel roller was ordered to be applied firmly round the abdomen, and compression made by means of pasteboard, previously soaked and modelled to the abdominal surface.*

From this time, the abdomen rapidly diminished in volume, while the amount of purulent viscous fluid discharged from the bladder varied from three to five pints in the twenty-four hours. The appetite and general health continued good; and she was ordered nutritious diet, with four ounces of wine daily. On the 23d, the amount of pus contained in the urine was greatly lessened, and the clear portion presented only a slight haziness on the addition of nitric acid. On the 27th the abdomen had regained its natural size, although a dense mass, evidently the collapsed ovarian sac, could readily be distinguished, occupying the left iliac and hypocondriac regions. The urine now also was natural in quantity, and presented only a slight sediment, consisting, as shown by the microscope, of some crystals of oxalate of lime, and a few pus globules.

From this period she may be said to have recovered. She suffered occasionally from uneasy feelings on the left side, sometimes amounting to pain, which were relieved by the application of four leeches, followed by a small blister. One of the leech bites ulcerated superficially, but soon healed up. She was dismissed on the 18th of December, expressing herself as being well in every respect, having been sitting up and running about the ward for the fortnight previous. The indurated mass in the left iliac region was greatly diminished in size, but still very perceptible to the feel, though not to the eye.

Remarks.—The history of this case can, I think, only lead to one conclusion, namely, that an ovarian encysted tumour was present on the left side; that the individual cysts had, if not altogether, at all events for the most part, broken down to form one large cavity;

that the contents of this cavity had suppurated, and a fistulous opening, formed either into the ureter or bladder (most probably the latter), through which the contained fluid was evacuated, permitting collapse of the sac and cure of the disease. The permanency of this cure will depend upon, whether all the secondary cysts had been ruptured and were broken down before the fistulous opening took place. This is a point which it is impossible to ascertain with certainty; but a careful examination of the woman before she left the Infirmary, convinced me that no rounded nodules or cysts could any where be felt.

The only instance I am aware of, in which an opportunity presented itself of dissecting an ovarian encysted tumour some time after its spontaneous rupture, was in an individual I saw examined with Dr Simpson, by the late Dr Makellar.—(*Monthly Journal*, Jan. 1847, p. 558.) In that case the cavity of the cyst was almost obliterated, and its walls were thickened and of cartilaginous hardness. A fistulous opening, however, was kept up between the tumour and the abdominal walls, below the umbilicus, where it had burst, and the patient sank from the continued discharge. How far a communication with the external atmosphere in this instance, and the presence of chronic peritonitis, may have operated unfavourably, I do not know; but the total cessation of all discharge, and absence of these circumstances in the case related, augurs well for her permanent recovery.

Whether a fistulous communication between the ovarian sac and urinary passages be favourable or not, is uncertain; for I have been unable to discover any recorded case in which this has ever happened. Many instances are to be met with where similar cysts have burst into the peritoneum, the fluid been absorbed, and excreted in large quantities by the kidney as urine. Other cases are to be met with, where the contents of the tumour have burst externally by ulceration through the abdominal walls, or into the vagina, or into the intestines; but in none, so far as I am aware, previous to the one now related, have the contents of the tumour been evacuated directly as a purulent viscous fluid from the bladder, proving a direct communication with that organ.

The occasional occurrence of such spontaneous cures, has led to the proposition of producing permanent artificial openings, with a view of imitating a natural cure. Mr Bainbrigge of Liverpool—(*Prov. Med. and Surg. Journal*, vol. iii. p. 593)—suggests making an incision into the sac, and uniting its edges with the external wound; and Dr Tilt of London—(*Lancet*, vol. ii. 1848)—has lately proposed making a minute aperture by means of Vienna paste, so as to cause a permanent opening. Such practice can only be useful at a particular period in the growth of ovarian tumours—that is, when all the internal cysts have broken down into one; indeed, it is only in these cases that Dr Tilt proposes making the aperture. But such cases are exceedingly rare, and the practice recommended

can be of no real advantage until these gentlemen instruct us how to distinguish in the living subject unilocular from multilocular cysts. Numerous dissections of ovarian tumours have convinced me, that in the present state of the art this knowledge is not to be arrived at with any degree of certainty; and that consequently any proposal, however valuable in itself, which is founded upon the assumption of our possessing that knowledge, is not likely to be practically beneficial.

Another proposition, however, has been made, which deserves consideration. In the paper formerly referred to, I remarked—"One practical rule to be followed in the treatment of these cases is, not hastily to have recourse to tapping, but by all possible means of delay to further the natural disposition, which the internal cysts exhibit under pressure, of forming one large sac." "There is every reason to suppose, that artificial pressure is capable of facilitating the absorption of the walls of the secondary cysts, and their opening into each other; but we possess no means of ascertaining when only one sac is produced. That it has succeeded in obliterating and ultimately curing the disease, however, has been proved by Mr Isaac Brown—(see cases recorded in the *Lancet*)—whatever other opinions may be held respecting the propriety of his treatment."

Now, the case I have read seems to me illustrative of the effects of pressure. It must be acknowledged that the seven months which had elapsed between the time the tumour was first perceptible, and the period when it spontaneously burst and collapsed, was a remarkably short one. In the most favourable cases this result takes about two years to accomplish by itself; but in the instance of Pyper, the tumour was subjected to the gradually increasing and equable pressure of the pregnant uterus, and to its influence must, I think, be attributed the fortunate result and rapid breaking down of the secondary cysts. The ulceration into the bladder was probably determined by the direction the pressure had assumed in this case, and, of course, could not be imitated artificially.

There still only remain two methods of curing an ovarian dropsy by art—viz., by excision, and by pressure followed by puncture. The case I have narrated confirms the views suggested by pathology with regard to the *modus operandi* of the latter treatment; and if, in cases which do not admit of extirpation, pressure be so gradually and equably applied as to obliterate the internal or secondary cysts, an artificial opening then made would cure the disease. The difficulty is to ascertain when the moment for making the puncture has arrived—in other words, when a multilocular is converted into a unilocular cyst. In the present state of the art, this, as I have said, is impossible; but, as an exact indication of the difficulty is often the best preliminary to its removal, I do not despair of some day seeing it completely conquered by the cultivators of rational medicine.